THE

UNIVERSITY OF WYOMING

LAND-GRANT COLLEGE RADIO HOUR

...oOo...

Presented by

STUDENTS, ALUMNI, and FACULTY

of the

UNIVERSITY OF WYOMING

for

THE ASSOCIATION OF LAND-GRANT COLLEGES AND UNIVERSITIES

with the cooperation of

THE UNITED STATES DEPARTMENT OF AGRICULTURE

and

THE NATIONAL BROADCASTING COMPANY

over the

NBC NATIONAL BLUE NETWORK

...oOo...

Laramie, Wyoming
September 28, 1938

THE COMMITTEE

Albert E. Bowman, Director Agricultural Extension, Chairman

J. A. Hill, Dean of Agriculture

Fredric S. Hultz, Head of Animal Production Department

Louis A. Mallory, Head of Department of Speech and Dramatics

David E. Eisenberg, Chairman Division of Music

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THE STAFF

Fredric S. Hultz, Author of the Script

Lawrence Voss, Cast and Direction

David E. Eisenberg, Musical Director

Harry W. Thompson, Director of U. of W. Band

Chas. W. Street)
and) Cowboy Musical Number
Cliff Johnson)

Allan A. Willman, Music Arrangements

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N.B.C. Announcer . . . . . .
Announcer . . . . . John C. Baker,
U. S. Dept. of Agriculture.

THE CAST

John C. Baker, Announcer . . . . . Mr. John C. Baker

Cowboy Episode

First Voice . . . . . Dean Carl Arnold

Second Voice. . . . . Mr. Fay E. Smith

Meeting of the Legislature

Presiding Officer . . . . . Prof. Ralph Conwell

Col. Stephen W. Downey . . . . . Dr. O. H. Rechard

The Canyon Hold-up

First Voice . . . . . Prof. V. C. Coulter

President Crane . . . . . Dr. Arthur G. Crane

Mrs. Crane . . . . . Dr. Lillian Portenier

Paul. . . . . Miss Sally Hill

Robber . . . . . Dean Carl Arnold

Student Senate President . . . . . David Hitchcock

Dean Maxwell . . . . . Dean C. R. Maxwell

Dean Hill . . . . . Dean John A. Hill

Mr. Hultz . . . . . Dr. Fredric S. Hultz

Mr. Beath . . . . . Prof. O. A. Beath

Mr. Watson . . . . . Prof. W. B. Bradley

Mr. Bowman . . . . . Director A. E. Bowman

Mr. Tom O'Neil . . . . . Prof. V. C. Coulter

Mr. George Reed . . . . . Prof. Wilson Clough

UNIVERSITY OF WYOMING LAND GRANT
COLLEGE BROADCAST

National Farm and Home Hour
10:30 A.M. - 11:30 A.M. M.S.T.
September 28, 1938

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JOHN C. BAKER: The National Farm and Home Hour...coming to you today from the University of Wyoming in Laramie...

MUSIC: WYOMING MARCH SONG--UNIVERSITY BAND--VERSE, ONE CHORUS, AND FADE UNDER ON SECOND CHORUS.

BAKER: "WYOMING!" The very name has a thrill for any one who loves the spacious plains...the jagged peaks...the mountain streams...and the glorious sunshine of this Gem of the Rockies!

Jim Bridger and the early explorers loved this region. Many of those who trekked the pioneer trails to Oregon...to Utah...to California ...crossed through these rich mountain valleys, and many stayed or wandered on but to return later. They hewed homes from the great pines and spruce which make the timbered shoulders of the Rockies a mountain paradise and the summer playground of the Nation.

Here, in southeastern Wyoming, Jacques Laramie, intrepid mountaineer, established his headquarters...ran his trap lines...fished in the river which now bears his name and reveled in the vastness of the new country. Here the Indians found the best wood for making ceremonial bows, held their annual festival, and gave to the stately mountain range the name Medicine Bow...a range which rises to a glorious 12,000 feet at the edge of the Laramie Plains and shares Wyoming's mountain beauty with the Grand Tetons.

And to Wyoming led the early cattle trails from Texas.....

MUSIC: GET ALONG LITTLE DOGIE--SUNG WITH STUDIO ORCHESTRA--Swells...A few measures...FADES INTO

SOUND EFFECT: LOWING CATTLE ON THE MOVE...CREAKING WHEELS...COWBOY VOICES URGING ON A HERD OF CATTLE...

VOICE: Well, boys...this is Ol' Wyoming. Cheyenne lies right over behind them rolling hills. It'll soon be the end of the trail for this herd of dogies.....

SECOND VOICE: And there couldn't be a finer end of a cattle trail than these mountain meadows...just look at that grass...Aspen and Cottonwoods along the streams--good shelter from the sun and storms.

FIRST VOICE: Yes...Wyomin's goin' to be a great cattle country. This short grass on the plains and foothills and blue stem in the meadows...will make pasture and hay for a million head of cattle.

SECOND VOICE: Don't forget sheep. They'll do well on this short grass...and I hear that there are deserts in the west where antelope pasture on weeds and brush the year 'round. That'd be like the sheep ranges of Old and New Mexico.

FIRST VOICE: SHEEP!...I hate the smell of the beasts. No cow man wants to see sheep come in...They destroy the good cattle feed and tramp out more'n they eat.

SECOND VOICE: But lots of people like sheep, Tom...They'll produce wool and lambs on land not rich enough for cattle. Why!...I wouldn't be a mite surprised if several of the boys on this very cattle drive will be runnin' both sheep and cattle on these Wyoming ranges some day. There'll be a lot of changin' ideas about livestock---and everythin' else...in the years ahead...

FIRST VOICE: Bob, you're probably right...and I'm goin' to see some of those changes first hand. For I aim to stay and work in this new country...to make a home here...to raise a family...teach 'em to love the great outdoors...send 'em to school...give 'em advantages I've never had...

MUSIC: WYOMING MARCH SONG--UNIVERSITY BAND--SWELLS A FEW BARS--FADES INTO

BAKER: THE YEAR - 1886

SOUND EFFECT: BABBLE OF MEN'S VOICES--CONTINUED RAPPING OF A GAVEL...

PRESIDING OFFICER: The sessions of the Ninth Wyoming Territorial Legislature will now come to order! Come to order, gentlemen..(SOUND EFFECT CEASES).

PRESIDING OFFICER: Gentlemen...the debate this morning is on the bill for the establishment of certain institutions of a public nature in the Wyoming Territory.

SOUND EFFECT: CRIES OF "MR. SPEAKER...MR. SPEAKER"...GAVEL RAPS

PRESIDING OFFICER: The chair recognizes Colonel Downey of Albany County...

COLONEL STEPHEN W. DOWNEY: Mr. Speaker...and members of the Ninth Territorial Legislature...You have heard the message of Governor Warren recommending an appropriation for the founding of a state university at Laramie. We, as legislators, appreciate the benefits which will accrue to this Territory from the establishment here of an institution of higher learning. We all want this Territory to succeed. We want to see her resources developed. We want to see every interest go hand in hand until Wyoming is admitted as a state to the Union. In voting this measure I believe we are doing the fair and correct thing--something that should have been done long ago. Your children's children

and their children will enjoy the benefits which this legislature has in its power to confer today. Generations yet unthought of will profit from the great school which may emanate from this bill here before us. We hold in our power today the opportunity profoundly to influence the educational standards--the social organization--the government and--in fact--the very life of this territory which we hope is soon to take its place as a sister state in the glorious Union of States.

SOUND EFFECT: APPLAUSE. CRIES OF HEAR, HEAR. FADE INTO

BAKER: And on March 4, 1886, the bill establishing the Wyoming University was passed and signed by Governor Francis E. Warren. A month later the first University Board of Trustees met...and September 27, 1886, the cornerstone of the Main Building was laid. As the years passed new buildings were erected...the student body increased...the Wyoming Agricultural Experiment Station came into being...such names as Hoyt, Graves, Merica, Nelson, Soule, Knight, Hebard and Downey...early faculty members all...became known throughout Wyoming and in the educational circles of the Nation. And...then in August,1922, there came to Wyoming's campus a new president...FADE INTO

SOUND EFFECT: AUTO MOTOR UP...FADING TO BACKGROUND

FIRST VOICE: Well, Dr. Crane, just a few more miles down the canyon and you'll see Laramie stretched out before you. By the way...this canyon used to be the hangout for a noted gang of highwaymen.

DR. CRANE: Is that so! Well, it's good to know that times have changed.

WOMAN'S VOICE: (IMPERSONATING MRS. CRANE): I'm so glad that there aren't any more highwaymen.

PAUL: Mummy...what's a highwayman?

WOMAN'S VOICE: Be quiet...Paul.

FIRST VOICE: Well...as a matter of fact there have been some recent holdup attempts. In the old days the stagecoaches used to carry guards. If things get much worse we may have to go back to the idea of having guards...even on our automobiles.

DR. CRANE: That would be something worth noting...in this modern day. Say... what's that in the road ahead of us?

SOUND EFFECT: AUTO HORN

WOMAN'S VOICE: I do believe it's an old time stagecoach.

PAUL: Ooooh...look at all the horses.

FIRST VOICE: They're signalling for us to stop.

SOUND EFFECT: SCREECH OF BRAKES. BACKGROUND SOUNDS FROM STAGECOACH.

FIRST VOICE: What does this mean! You can't.....

ROBBER: Never mind, Mister. We're looking for a man named Crane. Arthur Griswold Crane.

DR. CRANE: My name is Crane. What can I do for you?

ROBBER: Here he is men!

SOUND EFFECT: SHOUTS OF MEN OFF MIKE.

ROBBER: Come on...get out of the car, Crane.

CRANE: I'll be glad to, gentlemen...but I'd like to know what this means.

ROBBER: This is a stickup...and you're going for a ride. Come on...you too, lady, and bring the kids along.

WOMAN'S VOICE: (FRIGHTENED) Do you suppose there's any danger, Arthur?

DR. CRANE: I don't know, Mother...but we'd better do as they tell us. What do we do now, gentlemen?

ROBBER: Get into the stagecoach...all of you. And shake it up.

WOMAN'S VOICE: Oh...don't say anything, Arthur. Hurry, children.

PAUL : (SOBBING) What are they going to do with daddy?

ROBBER: All in! Keep your fingers out of the door, youngster.

SOUND EFFECT: CLOSING OF STAGE COACH DOOR.

ROBBER: All right, men, let 'er go!

VOICES: Giddap there! Yippee! Get along there! (GENERAL SHOUTING)

SOUND EFFECT: STAGECOACH STARTS UP...HORSES HOOVES ON ROAD WALK THEN TROT AND THEN GALLOP.

BAKER: And so President Crane was welcomed to Wyoming. The old coach wheeled into town escorted by several hundred whooping students dressed as bandits on horses and with them a cavalcade of citizens in cars. A stop was made at the county fair grounds where most of Laramie's ten thousand people had gathered in the amphitheater to add their quota of western welcome. Here the President and his family were introduced... and here the President first outlined his plans for the development of Wyoming University. President Crane is here with us today...but before we ask him to tell us of those plans and how many of them have come to fruition...I am going to ask Professor Allan Willman, Head of the Piano

Department of the University of Wyoming, to play for us. Allan Willman will play...RITUAL FIRE DANCE BY FALLA

MUSIC: AS ABOVE.

BAKER: Just sixteen years ago this fall you first entered on your duties as President of the University of Wyoming, Dr. Crane. I wonder if you saw then the possibilities for growth and development and service which these sixteen years have brought?

PRESIDENT CRANE: Well, John Baker, I don't know that any of us that day realized just how fully the State University was destined to find its way into the everyday life of Wyoming. Of course, even then, the University had attained its majority, so to speak, and there were several hundred students on the campus.

BAKER: Would you tell us, President Crane, just how the University meets Wyoming's educational needs?

PRESIDENT CRANE: In the first place, the services and activities of the University of Wyoming are especially devised to be of greatest use for Wyoming people. Our State University is most deeply concerned with the problems of this state. Her teachers know what these problems are and her students are made to understand these problems in the classrooms. Whether it be mining, agriculture, history, banking, pre-medical, oil or bees, Wyoming, because of her altitude, her dry mountain air, her particular geology, must work out her own problems to suit the various conditions. In no other state may Wyoming young people learn so much about Wyoming as at their own State University.

BAKER: President Crane, I believe there are many people who would like to know something about the students here at the University, where they come from, what they study, what they do when they're not in class--and things of that sort.

CRANE: Naturally, people are always interested in information of that kind. Our students, 2000 of them, come from every part of the State of Wyoming, from the neighboring states--and we even have students here from foreign lands.

Our new school year opened just last week, and the records show that the largest enrollment is in the College of Liberal Arts. Next in size is the College of Education, and then Engineering Agriculture and Law follow in that order. That's about the briefest way that I can tell you what the students study while they're here.

BAKER: Certainly that gives us some idea of the things the young people at the University are most interested in studying. But not all their time is spent in the classroom. What about their activities in their spare time? Extra-curricular activities, I believe you call them.

PRESIDENT CRANE: That's correct---extra-curricular activities. We have committees of both faculty members and students for student welfare. They are set up with a view to rounding out and completing student life here at the University. We also have a department of student personnel. This department has a great many duties, including that of getting jobs for students who need part time work, and it also supervises the extra-curricular activities that you mentioned. Probably you can learn more about what the students do in their time outside of classes from one of the students than from anyone else. Here's David Hitchcock. Dave is a law student---a staff member of the student newspaper, and president of the student senate this year.

BAKER: Then he ought to know what's going on around the campus. Dave, suppose you tell me something about what you and the rest of the fellows and girls do outside of classes.

STUDENT: Well, that would be quite a long story, Mr. Baker. We've got a lot of things doing around the campus. Almost every student has some kind of activity that he's interested in. We have athletics of almost every kind, football, baseball, basketball, track, tennis, and so on. Lots of fellows are interested in those sports and of course that takes up a good bit of their spare time during the season for each sport.

BAKER: Do the athletics ever interfere with studies?

STUDENT: No SIR!! If a fellow's going to stay on the athletic teams, he has to be passing all of his subjects in the University. When he gets low in his studies, he has to drop out of athletics. Besides sports we have a dramatic club, a glee club, a school paper, a year book, and a lot of other things.

BAKER: It sounds as though this is a rather busy place---lots of things doing, even after school hours. Do you think there's much point to all this activity, David?

STUDENT: Of course there is. These outside activities give a fellow or a girl a chance to develop talents that he has---talents that maybe wouldn't show up in any class. Maybe a fellow taking agriculture has ability as a singer, or a geology student might have the makings of a journalist and turn out to be a writer on some technical subject.

BAKER: All right---I'm sold on the idea, Dave. I just wanted to get your slant on it. Thanks a lot for giving it to me. President Crane, you mentioned getting jobs for students who need part time work. Do very many of your students earn their own expenses--or part of them?

PRESIDENT CRANE: Yes---the records in our personnel office show that 70 percent of our students earn at least part of their expenses while they are in school. Some of them work for business houses here in Laramie; others work for their room and board; the University itself spends over $50,000 for student labor in its offices and on the campus. So if a boy or girl wants to come to college here, and has money enough to set himself up at the start, and if he's reliable and competent, probably he can get jobs

enough to pay much of his expenses, or perhaps he'll want to take advantage of our loan fund.

BAKER: Certainly you give prospective students every encouragement and help in getting an education. But what about your graduates? What do they do after they leave the university?

PRESIDENT CRANE: You'll find them in almost every walk of life--in almost every profession and every kind of business.

You'll find that our alumni have made a showing that compares favorably with that of any other university of similar size and age.

To the youth of Wyoming, the University of Wyoming offers a high quality of instruction at remarkably low cost, an interest in the student' welfare, a democratic campus, modern equipment, and a special concern for fitting young people to take an active part in Wyoming life.

BAKER: Thank you, President Crane.

Before proceeding further with our Farm and Home Hour visit to the University of Wyoming...we will enjoy a violin solo played by Dr. David Eisenberg, Chairman of the University Department of Music, accompanied by Allan Willman. David Eisenberg will play NOCTURNE BY CHOPIN.

MUSIC: AS ABOVE

BAKER: Next, let's talk with Dean Charles Maxwell, of the College of Education. Dean Maxwell, one of the things I've heard about here at the University of Wyoming is your summer school. You're the director of the summer school, I believe.

MAXWELL: Yes--that's correct.

BAKER: I wonder if you won't tell us about this summer school--and what makes it different from other summer schools.

MAXWELL: Even with all due modesty, John Baker, we are apt to become enthusiastic about our summer sessions...because, in addition to the standard instructional features which may be somewhat similar in all of the better universities, we have the finest summer climate in the world. You know ...our slogan is "The Coolest Summer School in America"...and it is a slogan which is supported by government records. People all over the United States are beginning to recognize the exceptional climatic conditions in Laramie and this summer we had students from approximately forty states in attendance.

Then, too, we have the University Summer Camp which attracts a most distinguished group of visiting professors to our campus each summer, and during the past fifteen years we have had students enrolled for graduate work from all the leading universities in the United States. At the

Summer Camp we specialize in the outdoor sciences, such as, Botany, Zoology, and Geology. Columbia University is affiliated with the University of Wyoming in giving the courses in geology at the Summer Camp and, each year, sends professors out to aid in the instructional program.

BAKER: And what of the work of your college during the regular school year, Dean?

MAXWELL: The College of Education has for its province the training of teachers for all types of service in the schools of the State. It is the only higher institution for the training of teachers in the State and its organization in connection with the University, therefore, possesses superior advantages. Students have an opportunity to pursue a wide range of subjects that cuts across departmental and college lines.

BAKER: Don't most of the states have one or more normal schools or teachers' colleges?

MAXWELL: Yes, this is quite true, Mr. Baker, but the advantages of having one institution for the training of teachers in connection with the University are many. There is no duplication of plant and equipment; the facilities in a university are much greater where there are several colleges on one campus than in an institution that confines itself to one field. Such an organization is much more economical to the state, and gives students preparing for teaching a broader social background, as they are associated with students who have different vocational objectives. Again, in their academic work they are in classes with prospective engineers, lawyers, chemists, journalists, and others. This does not in any way hamper the strictly professional work in education as it can be carried on in the same atmosphere that one finds in segregated teachers' colleges.

BAKER: Thank you, Dean Maxwell. It has been a privilege to hear you tell of the work of your college.

STATION BREAK:

BAKER: Continuing the Farm and Home Hour from the University of Wyoming, may I introduce Dean J.A. Hill...who is Dean of the College of Agriculture and Director of the Wyoming Experiment Station. Dean Hill, will you tell the National Farm and Home Hour audience something about the program of your college?

HILL: First of all, Mr. Baker, to give our students in agriculture a real training in facts and science as applied to farming and livestock raising in Wyoming, at least those things which can be learned from books, lectures, laboratories, and the stock judging class.

But we have one course which is the only one of its kind in America, I believe, and it has had wide recognition. I mean our course in recreational ranching.

BAKER: Recreational ranching?

HILL: Perhaps you've heard it called "dude" ranching.

BAKER: Oh--that's different. Yes--I read about your course in dude ranching a couple of years ago. Who has charge of that course?

HILL: Here's the man, right here...Dr. Fred Hultz, head of our animal production department.

BAKER: I'm glad to meet you, Dr. Hultz. I'd like to know something about this course in dude ranching.

HULTZ: Well, as Dean Hill told you--the official name in the catalog is "Recreational Ranching." You see, many of our western ranchers have paying guests during the summer...folks who want to view the scenery, to ride horseback, and get acquainted with the west. But our four-year course in dude ranching is first of all an agricultural course, intended to give the student as thorough a training in ranching and farming as we can give him in four years. Besides that, we teach them something about writing letters or circulars to attract guests, how to serve appetizing food, some of the interesting facts about Wyoming's geological and historical past and the interesting things about present plants and animals. We feel that if our ranch host knows these things, he'll be more interesting to his guests and they'll get more enjoyment out of their visit.

BAKER: Have you had very many students studying dude ranching?

HULTZ: The first year we had four boys and one girl and the next year eight boys and another girl. Incidentally, she married one of the boys and now they have a little.....dude ranch of their own, in South Dakota. But last week five more girls entered the course...so we still have girls among the fifteen now enrolled.

BAKER: I suppose most of the dude ranching students come from ranches here in Wyoming.

HULTZ: No, as a matter of fact, they don't. Of course, we've had several from Wyoming, but we've also had them from North Carolina, Georgia, New Jersey, New York, Missouri, New Mexico, Colorado, and Massachusetts.

BAKER: Somehow, I can't imagine a dude ranch in the East--but maybe you've converted the Easterners to the West. Thanks very much, Dr. Hultz.

BAKER: Dean Hill, we'd like to know something about the kind of farming you do in Wyoming. Probably it isn't the same as farming in--well, in Iowa, or New York State.

HILL: No, it isn't. We don't have much rainfall, and that influences the way we farm out here. Some of our farms are irrigated. Water is brought to them in canals and ditches from rivers and reservoirs that are necessary to collect water and get it to the fields.

Then, much of our state is given over to ranges. Grass doesn't grow as well in this dry country as it does where there's more rainfall. So it takes from 20 to 40 acres of grazing land to support one cow for a year.

Then, we have a third type of farming, where the farmer grows his crops with the limited rainfall that we have.

BAKER: That's what you call dry farming, isn't it?

HILL: That's correct. The yields that can be produced are so low that it takes quite a large acreage for each farm. Some of the land can produce crops only in alternate years--and must lie idle every other year, to gather moisture.

BAKER: Certainly that's different from the type of agriculture with which many farmers in the United States are familiar. Wyoming was a very young country when the University was started...it's still young, for that matter. How did you know what to teach your students in agriculture?

HILL: That's where our experiment station becomes important...studying the problems of Wyoming agriculture. And, of course, the observation of actual farming operations in the state is always important. Research and observation really provide the basis for our teaching in agriculture.

As you probably know, we don't limit our agricultural teaching to the University campus. We take the latest information on farming and ranching and farm living to the people of the state by means of bulletins, newspaper articles, radio programs, and through our state and county extension services.

BAKER: Yes, I think most of the Farm and Home Hour family is familiar with extension work--and experiment stations. Is the Wyoming experiment station located here at the University, in Laramie?

HILL: Yes, the central station is here, but in addition we have nine branch experiment stations, called state farms, in nine different counties all over the state. So we try our experiments under the conditions found in every important region of Wyoming.

The experiment station here at Laramie is the highest central experiment station in the United States. So, when the United States Department of Agriculture wants to conduct any experiments with crops or livestock in which altitude is likely to be a factor, those experiments are often brought here to Laramie.

Here's the story of one of our most interesting recent discoveries. It concerns Professor Beath, of our department of chemistry. Several years ago Professor O. A. Beath was talking with one of our Wyoming ranchers..(Fade Out)

RANCHER: So you think you've found out what's causing my cows to die of blind staggers, do you, Professor?

BEATH: Yes, I think we have, Mr. Gibson. It's a poisonous mineral in the soil ---called selenium.

RANCHER: Selen...what'd you call it?

BEATH: Selenium... S-E-L-E-N-I-U-M, selenium...it's a chemical that isn't very common in soils. Belongs to the same group of minerals as sulphur. You remember the last time I was here, I took back some plants from your range, where the cattle had been troubled with blind staggers?

RANCHER: Sure do. Is that what caused some of those weeds to smell like rotten eggs?

BEATH: You guessed it. That odor gave us an idea. The only thing that I could find that didn't belong in those plants was selenium. I found the same thing in similar plants from other ranches where they've been having the same trouble with blind staggers. So it looks to me as though selenium is the thing that's causing the trouble.

RANCHER: Well--I just about had it figured out that the cows were being poisoned by some plant. There's lots of milk-vetch in that pasture where I've had all the trouble. On the lower range, the cattle have done just fine, and I haven't found any vetch plants there.

BEATH: Have you seen the cattle eating on the milk-vetch?

RANCHER: Well---no, I haven't. They don't seem to bother it much, but that was the only thing I could figure out that might be causing the blind staggers.

BEATH: Hmmm. Well---that may have something to do with it. Tell you what, Mr. Gibson: I'd like to take some more of that milk-vetch back to the University with me--and some soil out of the pasture where the cattle haven't been bothered. Maybe that will tell us something more about this business of blind staggers.
(Fade at end of speech)

MUSIC: SLOW: SWELL MINOR CHORDS FOR FIVE SECONDS: THEN FADE. -- Uni. Band.

RANCHER: Hello there, Professor. Thought maybe you'd forgotten about us off here in the hills.

BEATH: Not at all, Sam Gibson. During these last few months I've been working on that milk-vetch--and on the soil that it grows in.

RANCHER: Find any of that selen--well--that stuff you found in the pasture grass?

BEATH: You bet I did. Since I saw you last I've tested pasture grasses, soils, milk-vetches, and other native weeds from all over the state. I found selenium in many of them. But here's the interesting thing. A soil may carry lots of selenium, and yet the pasture grasses won't take it up--unless this milk-vetch is growing there too.

RANCHER: What do you make of that?

BEATH: Well, here's the way it looks to me, Sam. This milk-vetch and certain other native plants won't grow except where there's selenium in the soil. But pasture grasses will grow 'most anywhere. If pasture grasses are growing alone, they're good, wholesome plants for your livestock. But if they're growing near this milk-vetch, the milk-vetch causes the selenium to be available--so the pasture grasses take it up.

RANCHER: And that's when they get to be poisonous to livestock?

BEATH: That's the idea.

RANCHER: Say, Professor, is the milk-vetch the only plant to watch for?

BEATH: No, Sam, there are several more. All of them require a special type of soil. They don't just grow anywhere. To Botanists throughout the country these plants are known as Beath's Indicators. When you see them, it's a sign that there's selenium in the soil and a sign that some of your pasture grasses are likely to be poisonous to your livestock.

DEAN HILL: That's perhaps one of the most interesting of the stories about the recent work in our experiment station, but, of course, it is no more important to Wyoming agriculture than some others. For example: our work in certifying seed potatoes--to be sold to growers of early potatoes in the South; the work that we have done in helping farmers to improve their wool so that they get more wool and get a higher price for it; and the work that Dr. Vass has done in studying the different methods of range management of livestock, to see which methods work out best--and then telling farmers and ranchers what he has found out. Those all are important contributions that the experiment station has made to the agriculture of Wyoming and of the West.

In addition, the college and station take part in numerous other programs of service, research, and demonstration. There are the new national farm programs, crop control, soil conservation, which are so much in the public eye, and then there is our special work in training teachers of agriculture for the high schools.

BAKER: You spoke of the part of the college in the national farm program. Who is responsible for that phase of the work?

HILL: A large number of people are assisting in the program in Wyoming, but A. E. Bowman, Director of our Extension Service, is in charge. This is Director Bowman--on my right.

BAKER: Director Bowman, does the Extension Service have responsibility for the National Farm Program in Wyoming?

MR. BOWMAN: Yes, it does, Mr. Baker, and I'm glad to tell you the interesting story of just how the Wyoming Extension Service is helping with the National Farm Program. Many changes have taken place in the twenty-four years since the passage of the Smith-Lever Act, creating the Cooperative Extension Service. The Service itself has changed during the time and has come to be so much a part of rural life that new programs and agencies

continually look to it for assistance and counsel. Practically every Federal and State agency having to do with agriculture approaches the county through the door of the county extension office.

BAKER: Mr. Bowman, helping with the National Farm Program must have meant a lot of extra work for your agents.

BOWMAN: It certainly has placed extra burdens on County Extension Offices, but not a single agent has complained. In most of the counties it has more than doubled the work and if we are not doing more, it is because we lack the means and the men to do more.

BAKER: How about results, Mr. Bowman? Did the ranchers do anything of permanent worth on their ranches in complying with the AAA ranch program?

BOWMAN: Yes, they did, Mr. Baker. But here's a rancher who can tell you what he and other ranchers in the state have done in connection with the agricultural adjustment program. Mr. Tom O'Neil of Big Piney.

BAKER: Fine---we'd like to hear about Wyoming ranchers and the triple A, Mr. O'Neil.

O'Neil: Well, Mr. Baker--We're getting some better ranches here in Wyoming--thanks to the help of the triple A and the extension service. A good share of the ranchers in the state are going at least part way in complying with the triple A program. Last year we seeded thousands of acres to crested wheat grass--built dams to store water for stock and to prevent washing. About a thousand springs in the state were cleaned out and rocked up so they're good watering places. We poisoned ground squirrels and prairie dogs-----

BAKER: What'd you want to do that for?

O'NEIL: Because they eat a lot of valuable livestock feed. Another thing we did was build fences to protect the range--and we made a start toward a better system of grazing. We ranchers are thinking more and more these days about handling our ranges so they'll produce good grazing--not just for this year, but for all the years to come.

BOWMAN: Thank you, Mr. O'Neil. Now--Mr. Baker--you've heard about what the ranchers are doing. Next--you might like to hear about the farmers of Wyoming--and the things they are doing under the triple A program.

BAKER: Yes, I would, Mr. Bowman--but first tell me this: What's the difference between a farmer and a rancher? You see--when I get this far west--I'm an easterner.

BOWMAN: I think your question makes it clear that you are an easterner. To us--here in the west--a rancher is a man whose principal type of farming is grazing cattle or sheep. A farmer is one whose chief enterprise is producing crops, along with some livestock, either under irrigation or by dry farming.

BAKER: Well, I'm glad to have that straightened out. Now--let's hear about the farmers and the AAA.

BOWMAN: Here's a farmer who can tell you about that--Mr. George Reed, of Pine Bluffs.

REED: One thing we farmers have done within the last year as part of the AAA program has been to take some of our land that isn't suited to other crop and seed it to pasture. About ten thousand acres was seeded to crested wheatgrass last year. Much of this was sown to be harvested as seed, and so it will provide a cash income. In the southeastern part of the state, where the soil blows easily, about 30 thousand acres was strip cropped. Some of our farmers are farming on the contour; a few have built field terraces; and over eleven hundred tried improved types of summer fallow. We're seeding alfalfa, sweet clover, and grasses--and developing dry land and irrigated pastures. We're trying to get our Wyoming farm land to producing the things that it can produce best--

BOWMAN: Thanks for that account, Mr. Reed. You see, Mr. Baker, the story of extension work in Wyoming is so big that I could spend the rest of the day talking about it--about the way our Wyoming turkey business has grown in the last few years until today it's a million dollar industry--about the certified potato seed industry--about the 490 miles of new electric lines built last year to serve farm families--and many other things. One sheep raiser in Johnson County started a program of breeding and wool culling that increased his shearing average 3 1/2 pounds per sheep in five years. The Extension Service had a hand in all of those and many other projects.

BAKER: And I suppose you have 4-H Club work.

BOWMAN: Absolutely--our extension workers--and volunteer local leaders have developed a splendid organization of thousands of boys and girls.

BAKER: And Home Economics extension work, too, I suppose.

BOWMAN: Certainly. We have thousands of 4-H Club members and 250 rural homemaker clubs with 6000 members.

And men and women alike are giving special attention these days to planning for their communities and their counties. Proper use of the land is the basis for this planning--but plans for the community--county--and state include all the factors which have a bearing on successful agriculture and happy living.

BAKER: That sounds like a big job--and a mighty important one, Director Bowman. Thank you for telling us about the work of the extension service--and thanks also President Crane and the University staff members and to Chuck Street and Cliff Johnson, our cowboy musicians.

And now, we hear from the University of Wyoming band, under the direction of Mr. Harry Thompson. The band will play the Wyoming March.

BAND SELECTION: Wyoming March -- Fading for Announcer --

BAKER: All good things must come to an end--and that's true of our visit to the University of Wyoming, where this program has originated. This has been another one in the series of broadcasts on the National Farm and Home Hour from Land Grant Colleges. The next program in this series will be presented from the University of Minnesota on Wednesday, October 26.

NBC ANNOUNCER: This program has originated on the campus of the University of Wyoming at Laramie. This is the National Broadcasting Company.

CHIMES AND STATION BREAK.